Merging Logistics and Acquisition at the OSD Level

NDIA Systems Engineering Conference

Jerry Beck/Randy Fowler ADUSD(LPP)

25 October 2001

Topics

- **Rumsfeld Remarks at ALE Kickoff**
- **Logistics ~~Reengineering~~ ~~Reinvention~~ ~~Reform~~ ~~Transformation~~ Excellence**
  - **Performance Based Logistics (PBL)**
  - **Program Manager Responsibility/Accountability**
  - **Increased OSD oversight role**
- **Quadrennial Defense Review (QDR)**
- **Logistics Workforce**

SecDef Acquisition and Logistics Excellence Remarks, 10 Sep 01

- **Focus on the adversary that poses a threat, central planning, crushes free thought….**
- **...The adversary is the Pentagon bureaucracy**
  - **Uniformity of thought**
  - **Duplication of duties**
  - **Gridlock**
  - **Institutional inertia**
- **War on bureaucracy; not people, but processes**
- **The Pentagon needs to be liberated**
- **Shift $$ from bureaucracy to the battlefield (from tail to tooth)**

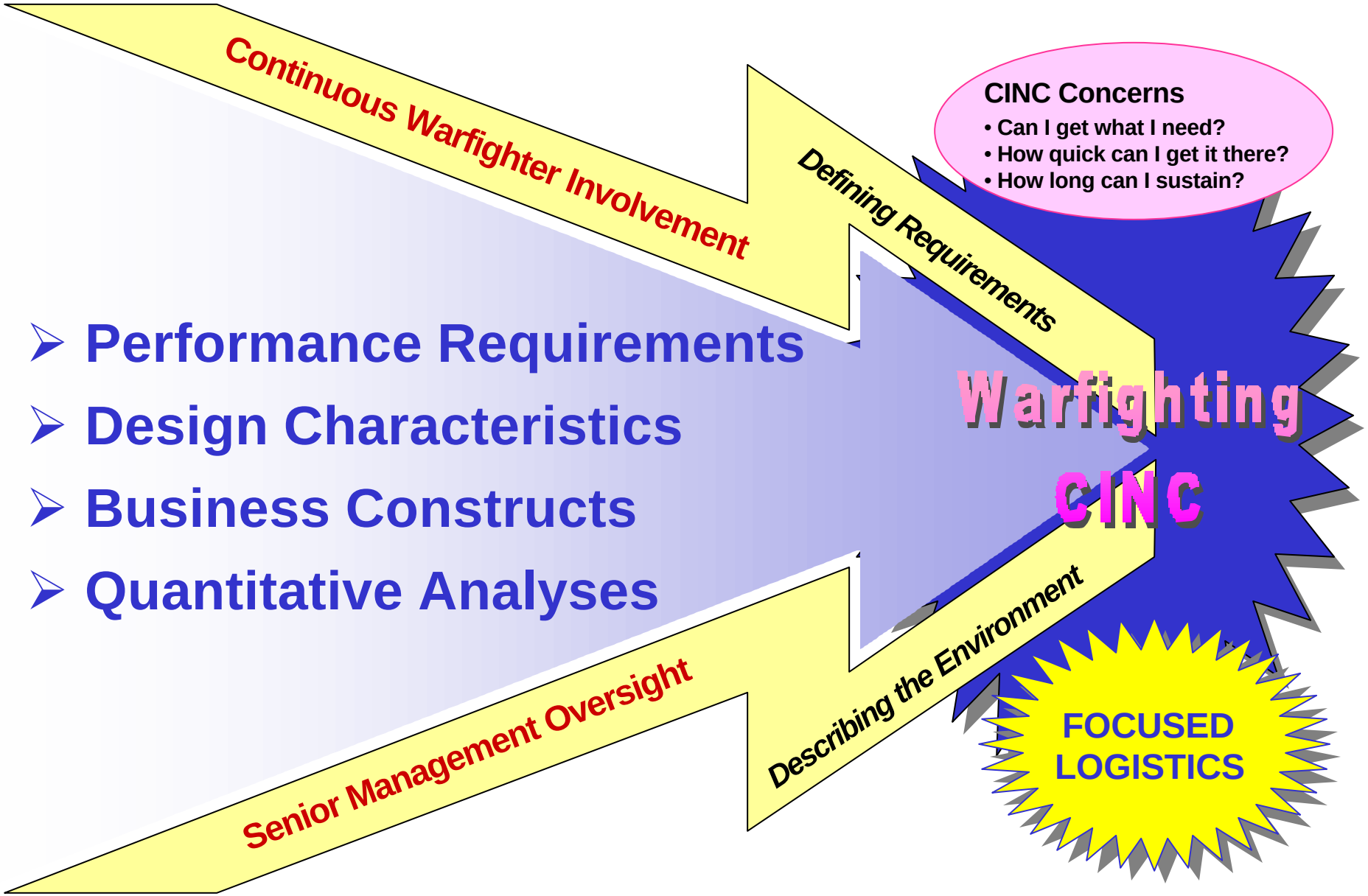
SecDef Remarks (Cont.)

- **DoD must change the way the world has changed**
- **Today's bureaucracy does not allow agility**
- **Encourage cooperation among Service Staffs and Secretariats (GC, LA, PA offices)**
- **Must decide what is "core" and be excellent in that**
- **Structurally different than previous efforts**
  - **President Bush supports**
  - **Performance, not promises**
  - **What you measure improves**

USD(AT&L) Priorities

- **Restore the credibility and effectiveness of the acquisition and logistics support process**
- **Improve the quality and morale of DoD's acquisition workforce**
- **Bolster the strength of the industrial base**
- **Leverage technologies for the long term through greater Science and Technology (S&T) funding**
- **Rationalize weapons programs with the national security strategy**

Future Logistics Environment



- Performance Requirements
- Design Characteristics
- Business Constructs
- Quantitative Analyses

Logistics Objectives

- **Procure high reliability systems**
  - **Reduce demand**
  - **Reduce footprint**
- **Optimize sustainment chain**
  - **To meet performance requirements**
- **Establish and maintain accountability in the process**
  - **Minimize “hand-offs”**

Our Challenge

Key Area	Future	Current Performance
Weapon System Readiness	Immediately employable force option (96 hours)	70-80% mission capable rates
Footprint	50% smaller footprint	600,000 deployable logisticians
Deployment	7-14 days rapidly deployable capability	130+ days (MTW)
Distribution	Global distribution capability	Fractionated system with 7+ accountability hand offs
Information Systems	Responsive to joint Warfighter needs	1,000+ systems

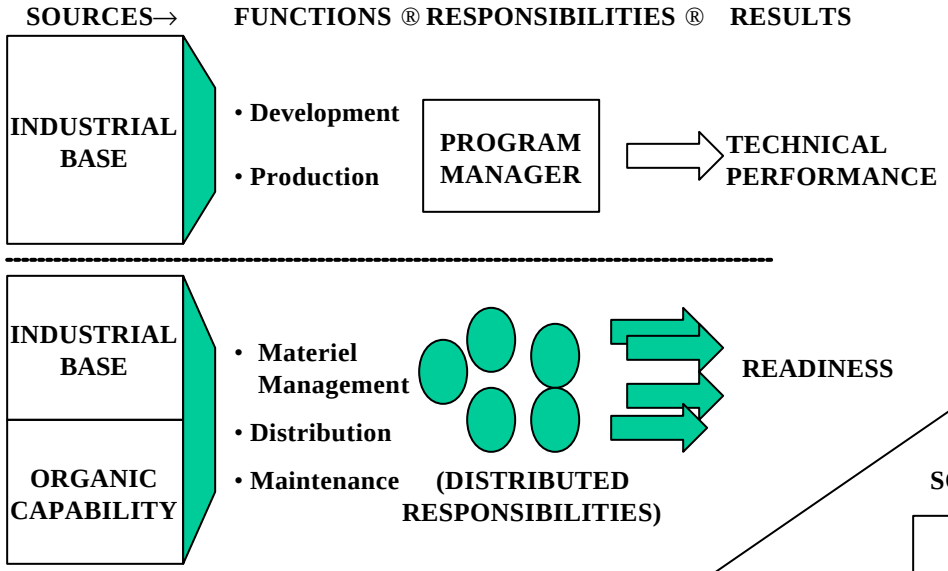
These areas must be addressed based upon a coherent vision/plan and the material needs of our fighting forces and CINCs.

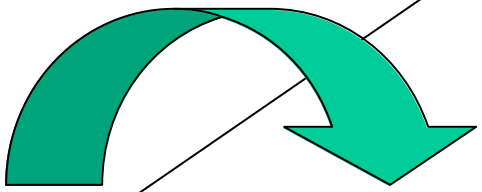
Performance-Based Logistics

- **Program manager is responsible for life cycle sustainment**
  - **PM team manages integrated logistics chain**
  - **DoD sustainment commands foster transparency and interoperability**
- **Performance agreements negotiated with operational customers**
- **PM builds performance agreements with commercial and organic providers**
- **Logistics and financial transactions transparent at the operational level**
- **Outcome performance measured throughout the process**

Performance-Based Logistics

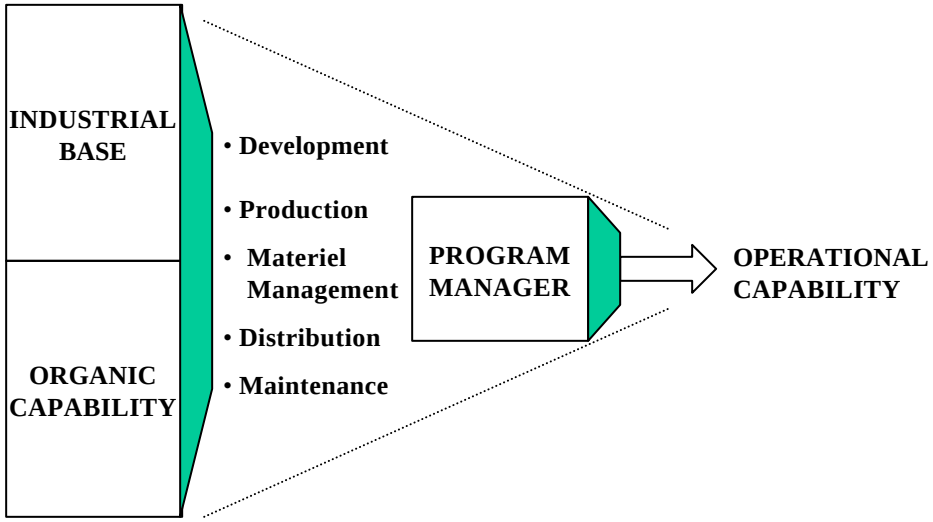
Traditional Logistics





End-State 2020

Performance-Based Logistics



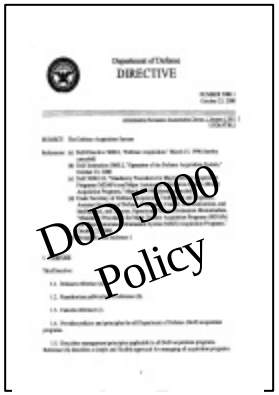
Implementing Performance-Based Logistics

Oversight via R-TOC Forum

Reengineer Product Support

30 Pilot Programs

Operational Demonstrations



Lessons Learned

Adjustments

Product Support Guide

Oversight via DAB/DAES

New program implementation

- **F-18 E/F**
- **F-22**

AlliedCoordination

- **NATO**
- **ADAC**
- **Bi-lateral exchanges**

- **Workforce Development**
- **Industry Outreach**

An integrated, disciplined program to achieve near-term implementation.

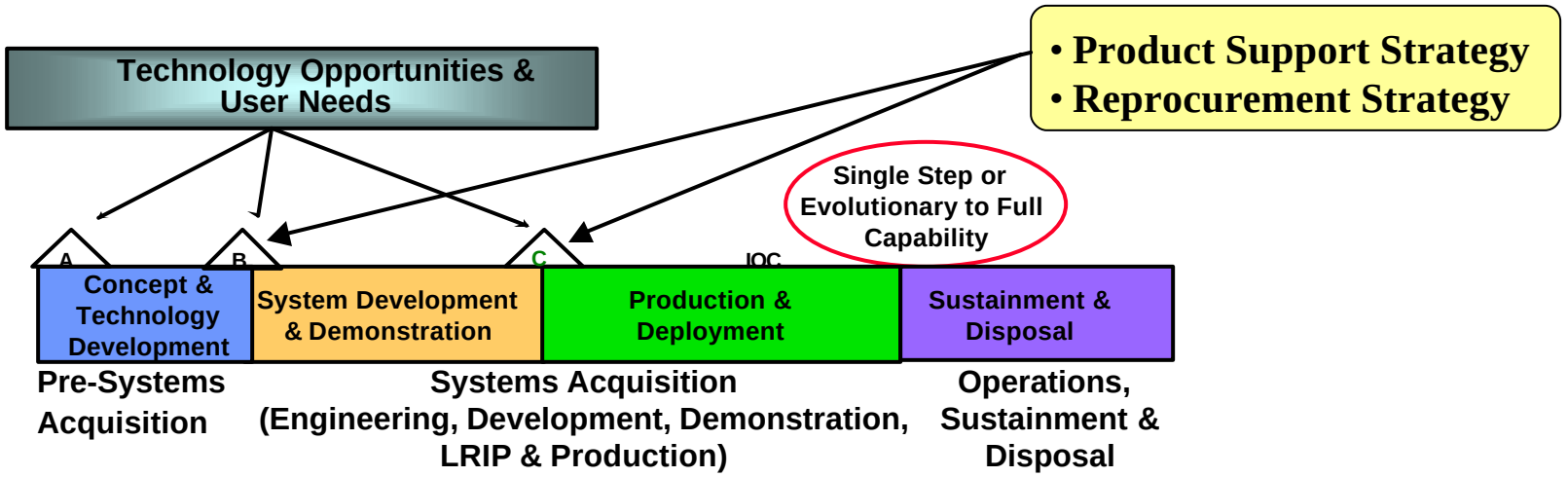
Product Support Objectives

- **Deployability/Mobility**
- **Footprint**
- **Inherent reliability**

} **Reduce Demand**

- **Overall Product Support Strategy**
  - **Readiness objectives**
  - **Performance Based Logistics**
  - **Support Integration**
- **O&S Costs**

DoD 5000 Acquisition Policy Revision

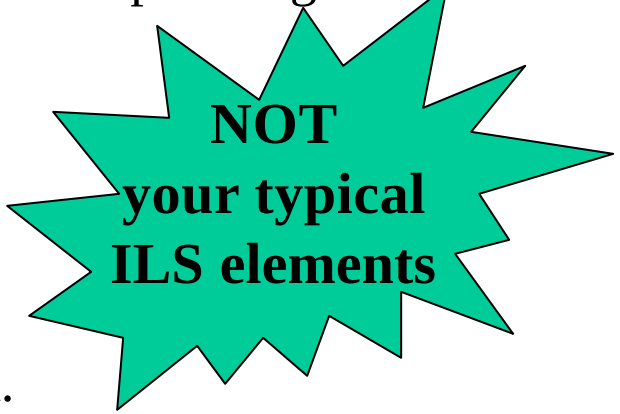


Major Objectives

- **Rapid acquisition with demonstrated technology**
- **Time-phased requirements and evolutionary development**
- **Integration of acquisition and logistics**
- **Product support emphasis**
- **Increased competition**

Product Support Strategy
DoD 5000.2-R

- C2.8.3.1. The PM, in coordination with Military Service logistics commands, shall include **planning for full life-cycle product support management** as part of the support strategy documented in the acquisition strategy….As a minimum, product support management planning shall address…the following objectives:
  - Integrated supply chains…
  - Segmented support by system or subsystems
  - Maintain relationship with the warfighter based on system readiness.
  - Select best-value, long-term product support providers and integrators based on competition.
  - Measure support performance based on high-level metrics such as MC rates..
  - Improve product affordability, system reliability …dedicated investment in technology refreshment.



- C2.8.3.2. The PM may select a **product support integrator** from the DoD or private sector. Activities coordinated by support integrators can include functions provided by organic organizations, private sector providers, or partnerships.

Product Support Strategy
DoD 5000.2-R (proposed update)

Currently in the process of including PBL in the next update to 5000.2R (2.8).

- **C2.8.3. Product Support. Product support is a package of logistics support functions necessary to maintain the readiness and operational capability of a system or subsystems. *Performance-Based Logistics (PBL) is the preferred approach for product support implementation. PBL utilizes a performance-based acquisition strategy, versus the traditional transaction-based approach. PBL allows PMs to optimize performance and cost objectives through the strategic implementation of varying degrees of Government-Industry partnerships*.**

DPG and QDR PBL Guidance

FY 03-07 Defense Planning Guidance

- **(U) Components will program to reduce non-mission critical facility inventories to industry standards by FY 2007. Components will propose plans to reduce overhead costs associated with mission-critical inventories and propose sale/lease-back or other innovative provisions to provide storage or(inter- and intra-theater) mobility. Plans will identify the implementation schedule for applying performance-based logistics to all new weapon systems and Acquisition Category (ACAT) I and II fielded systems by March 1, 2002.**

Quadrennial Defense Review (30 September 2001)

- **Performance-Based Logistics and modern business systems with appropriate metrics can eliminate many non-value-added steps. DoD will implement Performance-Based Logistics to compress supply chain and improve readiness for major weapon systems and commodities**

Logistics Roadmap to 2020

Logistics Resources (TY$B)

2002	2003	2004	2005	2006	2007
88.2	87.5	89.5	91.3	93.1	95.4

- Force closure 130+ days (MTW)
- 18-day average Customer Wait Time for spares (83 days for 95%)
- 70-80% mission capable rates typical
- 30-year-old processes
- 680,000 logisticians in operational units (AC/RC)
- 1000+ log IT systems - $3.8B/year
- 15% backordered @ 85 days average
- Emerging public/private integration

Logistics Processes:
- **Independent of scenario and capability**
- **Flexible and agile to respond to an uncertain world**

End-State 2020

Performance Based Logistics
Industrial Partnering for Consumables
Depot Maintenance
Global Distribution Management
Logistics Situational Awareness

Today

- Immediately employable force option for National Command Authority
- Rapidly deployable capability
- Deployment and sustainment in anti-access environment
- 50% smaller footprint
- Improved in-theater combat support and prepositioning
- Responsive management of support to the joint warfighter
- Incorporation of commercial advances
- Global industrial base for global distribution

2000 **2010** **2020**

Industrial Partnering of Weapon System Sustainment

Exploiting integrated industrial logistics chains to optimize equipment readiness

F/A-18 E/F Integrated Readiness Support Teaming (FIRST)

- *Savings / Cost Avoidances estimated at $52.4M over five year contract period*
- *Carrier stock effectiveness - 90%*
- *Integrates 125 suppliers, 15,000 items*

F-117 Total System Performance Responsibility (TSPR)

- **Support to 49th Fighter Wing rated Excellent**
- **All performance metrics met or exceeded**
- **Savings/cost avoidance in FY 99 - $27.5M**
- **F-117 withstood test of transition and overseas deployment to 2 combat locations**
  - **In Kosovo, F-117 flew 1023 sorties with a mission capable rate of 86%**

M-1 Abrams R-TOC and Product Support Pilot

- *Reduction of total ownership costs of 20% by FY 05*
- *Potential of $17B O&S cost reduction over the 30-year remaining life*
- *Partnership among PM, industry, and Army Materiel Command*

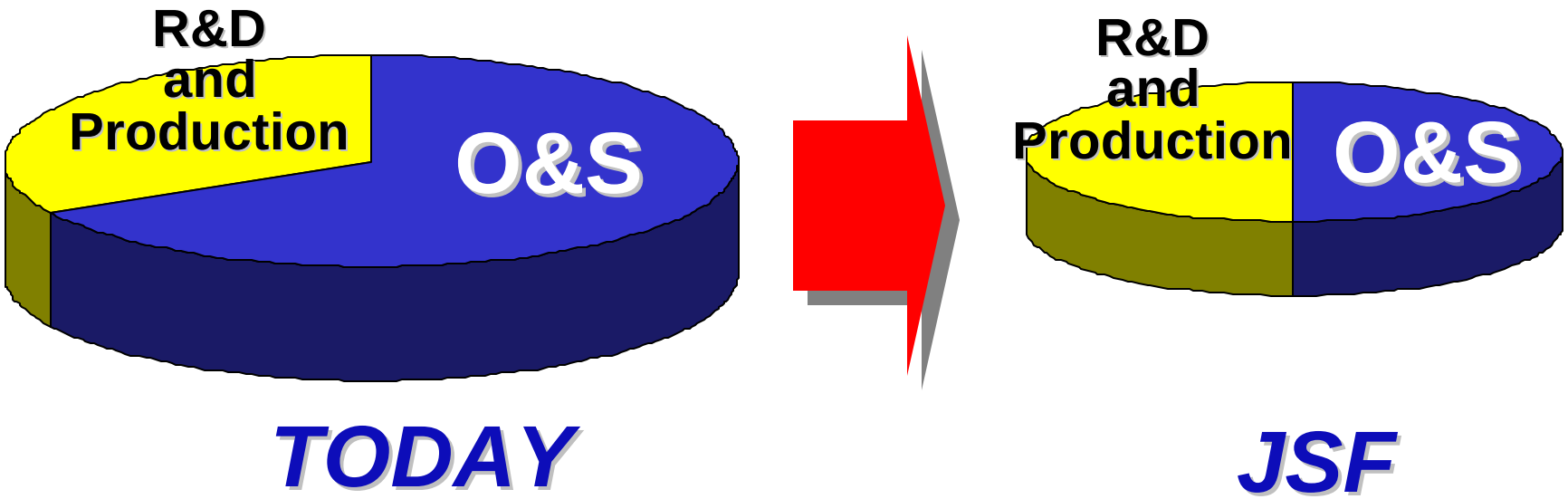
Advanced Amphibious Assault Vehicle (AAAV) Life Cycle Support

- *Estimated $240M Cost Avoidance over life cycle*
- *Embedded Training*
- *PM Life Cycle Oversight*
- *Competitive Sourcing*

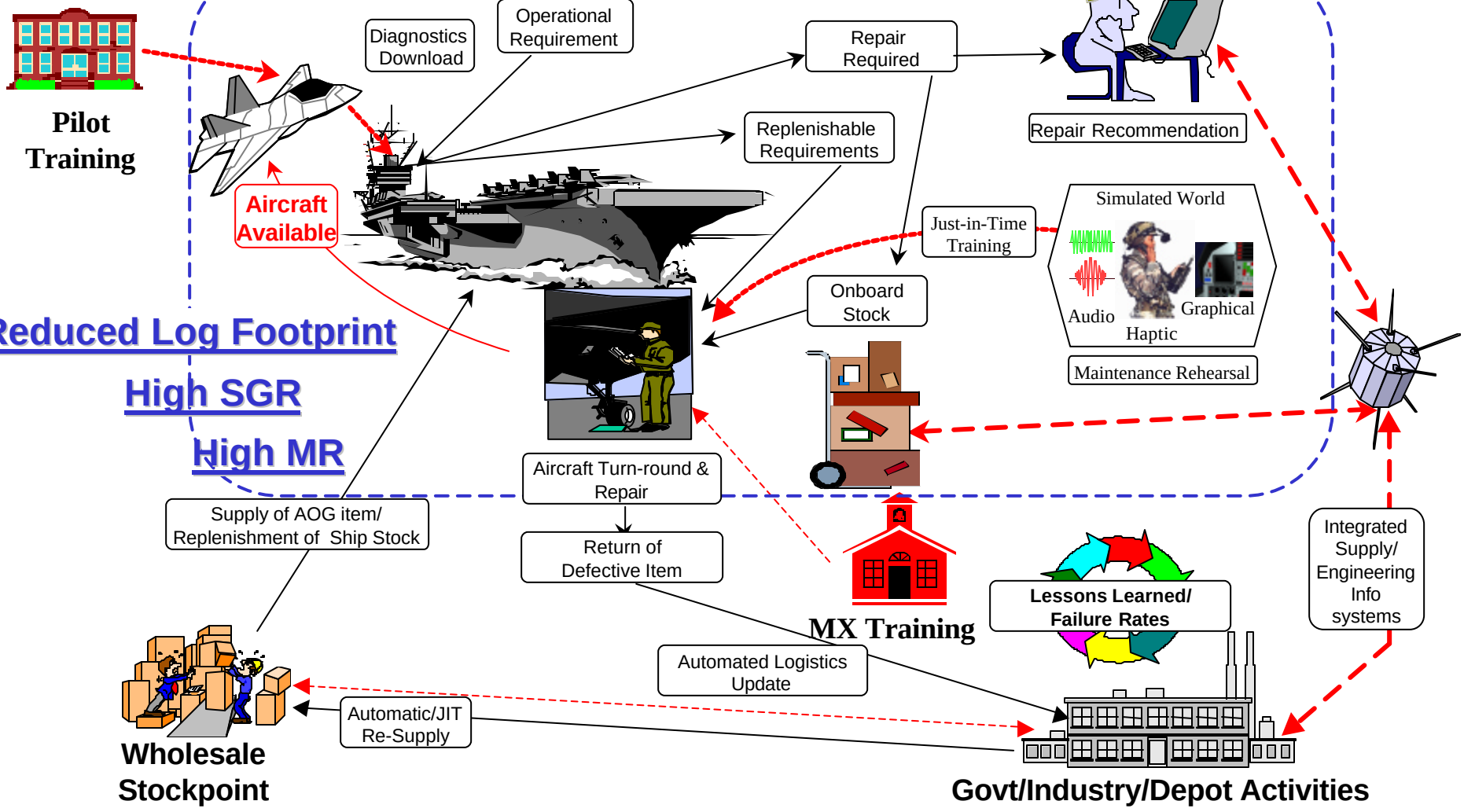
JSF KEY PERFORMANCE PARAMETERS (KPP)

- Interoperability
- RF Signature
- Combat Radius
- Sortie Generation Rate
- Logistics Footprint
- Mission Reliability
- CV Recovery
- STOVL Mission Performance

AFFORDABILITY CHALLENGE



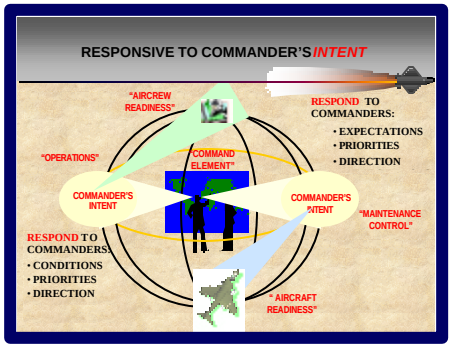
AUTONOMIC LOGISTICS CONCEPT



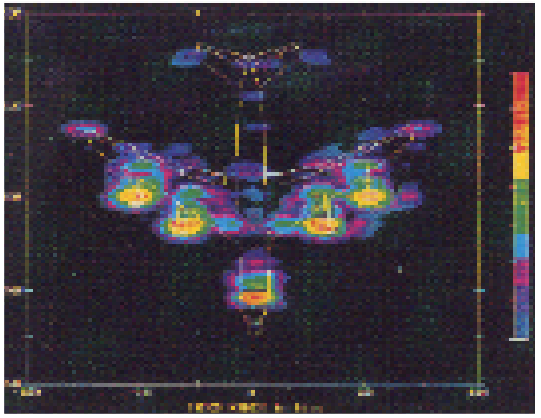
AUTONOMIC LOGISTICS TECHNOLOGIES

JSF Paintless Aircraft

CACE



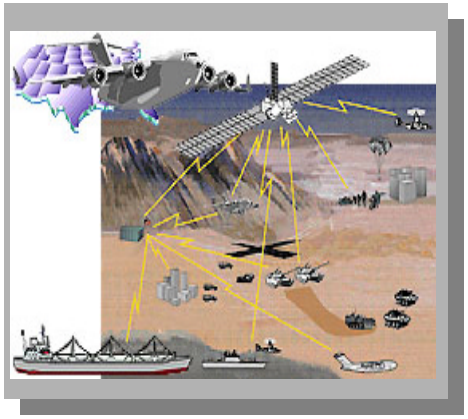
Supportable LO



Prognostics & Health Management (PHM)

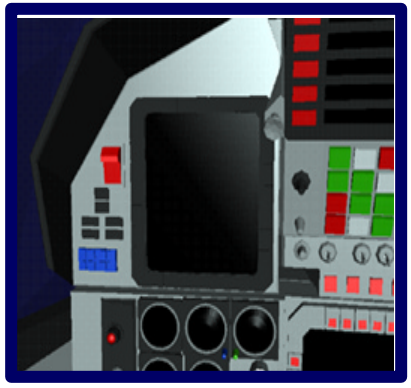
Oil Condition Monitor (OCM)

Joint Distributed information system (JDIS)



Reliability & Maintainability

Training



JSF SUMMARY

- Performance Based Logistics Approach
  - Government/Contractor Partnering & Teaming
- Departure From Business As Usual
  - Joint for the Life of the Program, No Lead Service
  - Major Reliability, Maintainability & Supportability Improvements
- Technology Demonstrated and Incorporated
  - PHM, JDIS, SLO
  - Paintless
- Road Ahead as We Enter EMD
  - Develop and Test the Autonomic Logistics System

Autonomic Logistics will deliver a fully integrated and tested logistics system for the Joint Strike Fighter

Workforce for 21st Century

VISION

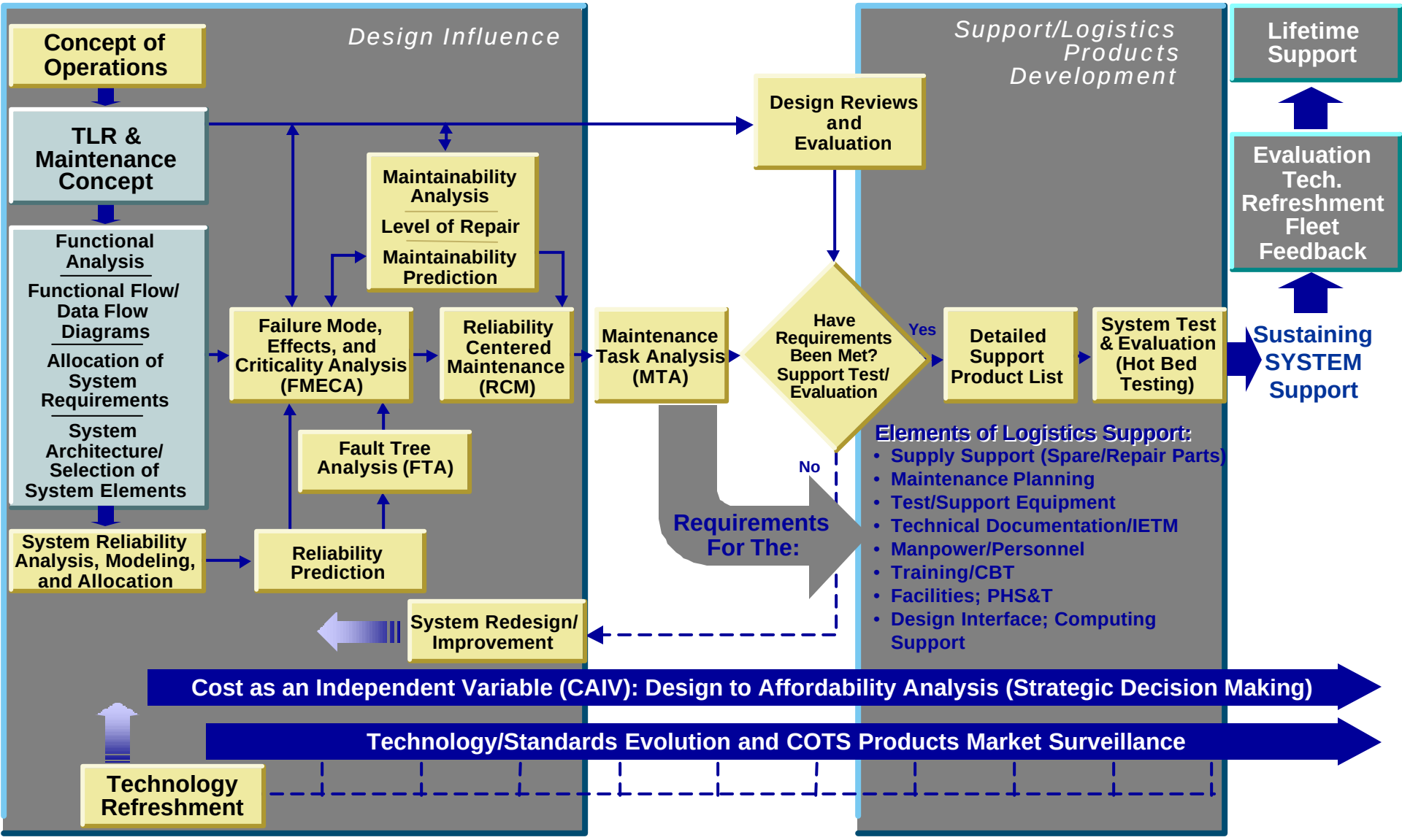
A future Acquisition workforce that will be smaller, highly talented and motivated, adaptable, knowledgeable of commercial practices and information technology and able to operate in a dynamic environment.

LOGISTICS WORKFORCE CHARACTERISTICS

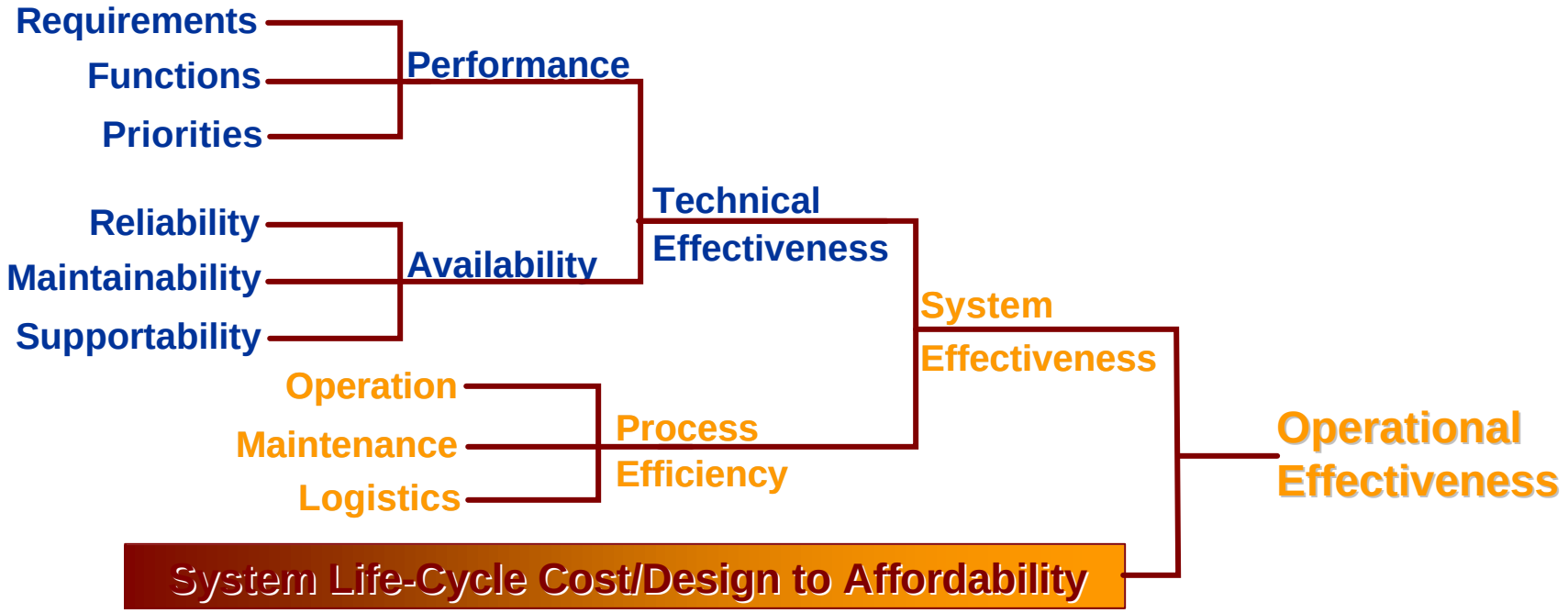
- **Professional Certification of Acquisition and Sustainment Logisticians**
- **Logisticians with Master's Degrees in Systems Engineering**
- **Life cycle thinkers capable of interplay with other fields**

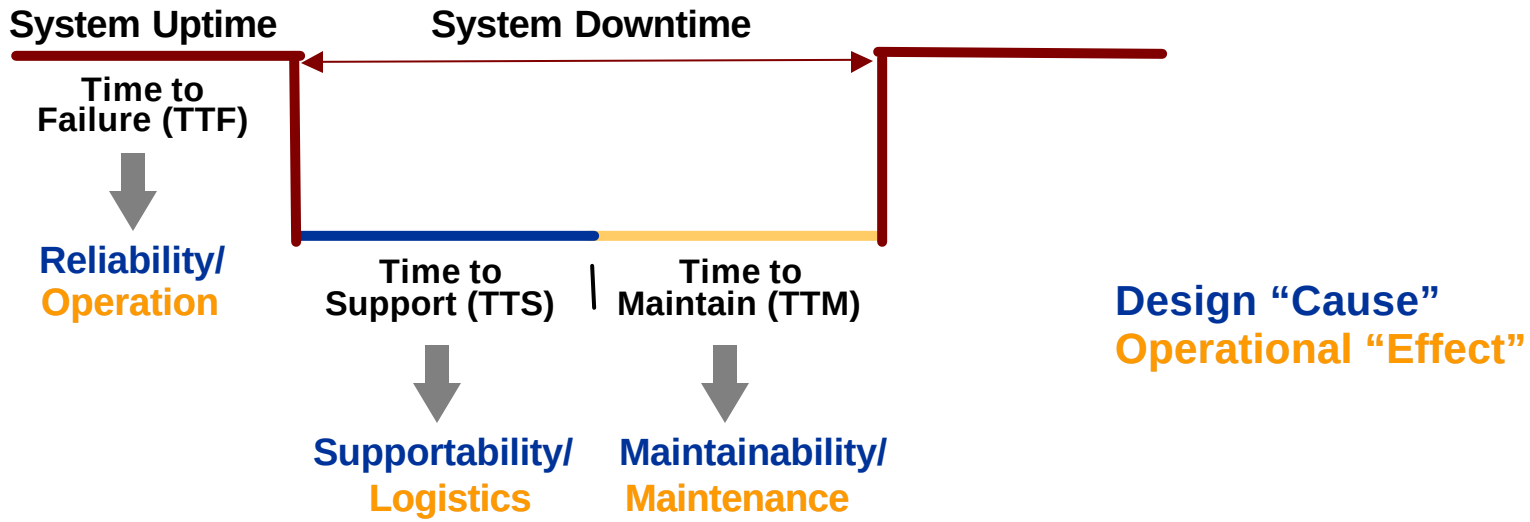
People Are Our Greatest Asset

Systems and Supportability Engineering



System Operational Effectiveness





Conclusion

- **Is logistics transformation/excellence another bumper sticker or the real deal?**
- **Government and Industry must work together to achieve this objective**
  - **Framework has been established**
  - **Performance based products**
  - **Challenge to implement, must be cost effective**
  - **Change is hard, but we owe it to the Warfighters to succeed**